

100 percent DIP and DOP.¹⁵⁰⁶ Verizon would avoid double recovery by subtracting NRC revenues (as a proxy for non-recurring costs) from the costs used to calculate ACFs.¹⁵⁰⁷

b. Discussion

587. We find that AT&T/WorldCom's assumption of 100 percent DIP and DOP is reasonable. Not only is this a surer method of avoiding double recovery, but it also seems to conform to the retail practice of recovering these costs through recurring charges. In addition, it furthers the policy objective of minimizing barriers to entry. Verizon's critique of AT&T/WorldCom's assumption of 100 percent DIP and DOP misconstrues AT&T/WorldCom's model. As AT&T/WorldCom explained, the assumption of 100 percent DIP and DOP is a modeling convention that is designed to reflect that these costs are recovered in the recurring cost study, not an assumption that any real network would be built this way. This assumption does not prevent Verizon from recovering any costs because AT&T/WorldCom provide for recovery of these costs through ACFs, just like all other loop maintenance expenses.

588. For similar reasons, we agree with AT&T/WorldCom that Verizon's proposed surcharge should not be permitted. These costs are more appropriately recovered through ACFs, which apparently is how Verizon recovers them today, as demonstrated by its proposal to back out these amounts from its ACF calculations. Recovery through recurring charges avoids the problem of knowing how much to reduce ACFs to avoid double recovery and reduces the risk of high NRCs creating an artificial barrier to entry. This approach also is more consistent with the pro-competitive policy goals of the 1996 Act.¹⁵⁰⁸

3. Manual processing activities

a. Positions of the Parties

589. The AT&T/WorldCom model assumes that no manual intervention is needed at the time an order is placed and that there will be a two percent fallout rate at the provisioning stage.¹⁵⁰⁹ That is, the model assumes that orders placed by competitive LECs are either accepted electronically or rejected electronically and that, once accepted, only two percent of orders will require manual intervention by Verizon due to some error *caused by the competitive LEC*.¹⁵¹⁰ AT&T/WorldCom argue that competitive LECs should not have to pay in NRCs the cost of manual processing that is attributable to errors in Verizon's databases or other network

¹⁵⁰⁶ Verizon Ex. 116, at 39-45.

¹⁵⁰⁷ Verizon Ex. 107, at 321-22.

¹⁵⁰⁸ *Local Competition First Report and Order*, 11 FCC Rcd at 15875-76, paras. 749-751.

¹⁵⁰⁹ AT&T/WorldCom Ex. 2, at 33.

¹⁵¹⁰ *Id.* at 33-34.

defects.¹⁵¹¹ AT&T/WorldCom state that recurring charges recover network maintenance and repair costs, including database synchronization, and these costs do not belong in NRCs.¹⁵¹² For similar reasons, the AT&T/WorldCom model largely omits design time in calculating NRCs. AT&T/WorldCom argue that these costs generally should be included in the recurring cost study.¹⁵¹³ In the model's Technical Assumptions Binder, however, AT&T/WorldCom seem to acknowledge that design time is necessary for provisioning some UNEs.¹⁵¹⁴

590. Verizon argues that the assumptions in the AT&T/WorldCom model are unrealistic. Verizon states that some orders are simply too complex to be processed electronically, such as orders for more than five new POTS loops at a single location.¹⁵¹⁵ Verizon also argues that no incumbent LEC has ever achieved a two percent fallout rate.¹⁵¹⁶ Verizon proposes a four percent fallout rate in its model, which it states is very ambitious.¹⁵¹⁷ Verizon argues that even when fallout is due to errors in Verizon databases or other network defects, the competitive LEC is the 'cost-causer' because the defect would not have caused a problem if not for the order.¹⁵¹⁸ In such cases, manual handling is necessary and should be recovered in a NRC. Verizon states that maintenance expenses recovered through ACFs reflect different processes than correcting errors that are revealed in the course of provisioning a competitive LEC order.¹⁵¹⁹

591. Furthermore, Verizon states that some "fallout" is and should be manual processing by design because it is not cost-effective to automate complex orders.¹⁵²⁰ Verizon contends that AT&T/WorldCom's model includes "design time" only for the two percent of orders that require manual intervention, even though some UNEs inherently require manual design 100 percent of the time, such as 4-wire loops, DS1 loops, designed transport, and digital

¹⁵¹¹ *Id.* at 16-17.

¹⁵¹² *Id.*

¹⁵¹³ *See, e.g.*, AT&T/WorldCom Ex. 21 (NRC Panel Surrebuttal), at 39-42 (discussing costs associated with DS1 and DS3 interoffice transport).

¹⁵¹⁴ *See, e.g.*, AT&T/WorldCom Ex. 23, Vol. 2, Technical Assumptions Binder at 37 ("The exception to non-designed loops is the 4-wire loop (analog or digital) which by its very nature constitutes a designed service/circuit.").

¹⁵¹⁵ Verizon Ex. 116, at 10.

¹⁵¹⁶ *Id.* at 14-17.

¹⁵¹⁷ *Id.* at 15.

¹⁵¹⁸ *Id.* at 69.

¹⁵¹⁹ Verizon Ex. 124, at 99-100.

¹⁵²⁰ Verizon Ex. 116, at 10, 25-26.

designed loops.¹⁵²¹ Verizon argues that no automated system exists that can perform such designs and that developing such systems would be extremely expensive for rather rarely performed functions.¹⁵²² Finally, Verizon proposes a Manual Surcharge (approximately \$20.00 for most UNEs) that is imposed whenever a competitive LEC requests that an order be handled manually.¹⁵²³

b. Discussion

592. We find that the two percent fallout rate used in the AT&T/WorldCom model is consistent with TELRIC requirements. We note that several state commissions have adopted this position.¹⁵²⁴ We also find that it is reasonable to assume, as AT&T/WorldCom do, that competitive LEC orders that have errors are returned electronically to the competitive LEC and resubmitted and that manual intervention by Verizon at the ordering stage should be unnecessary. We do not agree with Verizon that competitive LECs should pay NRCs that reflect manual handling of all orders for six or more lines. As noted by AT&T/WorldCom, this policy appears to be a “workaround” designed to deal with the possibility that Verizon’s OSS cannot reliably determine the available facilities for a given location.¹⁵²⁵ We also disagree with Verizon that costs associated with database errors are appropriately recovered from competitive LECs through NRCs. Database maintenance is a recurring cost that should be recovered in recurring charges through ACFs, and not through a NRC.¹⁵²⁶ Allowing Verizon to impose NRCs on competitive LECs to correct database errors provides no incentive to Verizon to avoid such errors.

593. We agree with Verizon, however, that a number of the UNEs at issue are inherently “custom-designed” elements and that AT&T/WorldCom do not appear to allow for necessary design time. Accordingly, for the elements AT&T/WorldCom have identified as designed elements, some sort of adjustment is necessary.¹⁵²⁷ There is, however, little record evidence on which to determine an adjustment to AT&T/WorldCom’s model. We require both

¹⁵²¹ *Id.* at 25-26; see AT&T/WorldCom Ex. 23, Vol. 2, at 83, 104, 130, 137.

¹⁵²² Verizon Ex. 116, at 10, 14.

¹⁵²³ Verizon Ex. 100, Vol. 11, Non-Recurring Costs Summary.

¹⁵²⁴ Commissions in numerous states inside and outside the Verizon service territory have found the two percent fallout rate appropriate. See, e.g., *Massachusetts Commission Pricing Decision* at 483; *New York Commission Pricing Decision* at 143; *Pennsylvania Commission Pricing Decision* at 178; *Investigation of the Southern New England Telephone Company’s (SNET) Proposed Unbundled Network Elements (UNE) Non-Recurring Charges (NRCs)*, Docket No. 98-09-01, Decision at 34 (Connecticut Commission Jan. 5, 2000).

¹⁵²⁵ AT&T/WorldCom Ex. 21, at 21.

¹⁵²⁶ At least one Verizon witness conceded as much. Tr. at 4909 (“Database maintenance is essentially a recurring activity, and it is [in] recurring rates.”).

¹⁵²⁷ These elements include 4-wire loops, DS1 loops, DS3 loops, and interoffice transport.

parties to negotiate further on this point in light of the issues decided in the arbitration order. If the parties are unable to reach a negotiated agreement, they may seek further arbitration of this issue. Until such time as the NRC for these elements is adjusted to include design time, we direct Verizon to provide any necessary design services subject to true-up.¹⁵²⁸

4. Disconnection costs

a. Positions of the Parties

594. Verizon's proposed NRCs include both connection costs and an amount equal to the costs of disconnecting service.¹⁵²⁹ Verizon estimates the cost of eventual disconnection and discounts it to present value assuming a 2.5-year life for every UNE.¹⁵³⁰ Verizon argues that it should not bear the risk of non-collection and that combining connect and disconnect charges is a standard practice in the telecommunications industry that allows Verizon to recover disconnect costs from the cost causer.

595. The AT&T/WorldCom model proposes separate disconnection NRCs. AT&T/WorldCom state that collecting disconnection costs at the time service is installed, as Verizon proposes, unnecessarily raises entry costs and discriminates against competitive LECs that provide superior service and thus keep their customers longer than average.¹⁵³¹ They argue that an incumbent LEC's risk of non-collection from a competitive LEC is much lower than from a retail customer and that disconnection is not always necessary.¹⁵³² For example, if Verizon wins back the end-user customer, the UNE may remain unchanged. Furthermore, they argue, if the UNE involves a retail customer that migrated from Verizon, the retail customer already paid for disconnection in the installation charge, and charging the competitive LEC again would constitute double recovery.¹⁵³³

b. Discussion

596. We agree with AT&T/WorldCom that disconnect costs, if any, should be recovered at the time of disconnection. Verizon has acknowledged that when a customer terminates service it generally leaves the facility in place so that it can be used by a subsequent

¹⁵²⁸ The true-up will occur once NRCs for these designed elements are established through negotiation or arbitration, and will be calculated for the period beginning on the date the rates in this order become effective.

¹⁵²⁹ Verizon Ex. 107, at 335-36.

¹⁵³⁰ *Id.* at 335.

¹⁵³¹ AT&T/WorldCom Ex. 13, at 71.

¹⁵³² *Id.* at 71-73.

¹⁵³³ *Id.* at 72-73.

customer.¹⁵³⁴ In many cases, there is no real cost associated with disconnection because the end-user merely switches LECs, but continues to be served over the same network elements with minimal or no change in provisioning. If another LEC wins the customer, either Verizon or another competitive LEC, the installation NRC will in most cases cover any costs of connecting the UNE to the new LEC's facilities.¹⁵³⁵

597. Collecting disconnection charges at the time of installation unnecessarily raises entry costs in contravention of the Act's goals of promoting competition. Moreover, the calculation of the disconnect cost is more complicated and more prone to error when that cost is recovered at the time of installation. Specifically, calculating the appropriate charge requires an assumption as to how long the competitive LEC will retain a customer, so that the future disconnection cost can be discounted to its present value. In this case, Verizon assumed that the average customer will stay with a competitive LEC for 2.5 years,¹⁵³⁶ but it provides no evidence to support this figure.

598. We also disagree with Verizon that recovering disconnect costs at the time of installation is appropriate because it may be too difficult to collect from a competitive LEC once service is disconnected. We note that the risk of non-collection only exists if the competitive LEC exits the market. In such cases, Verizon's "uncollectibles" markup to its UNE prices is a better way of addressing these costs.

5. Unbundling of IDLC Loops

a. Positions of the Parties

599. The AT&T/WorldCom model assumes that IDLC loops should be unbundled electronically from the central office by rolling the end-user's loop onto a "virtual DS1" that runs from the RT to a competitive LEC switch.¹⁵³⁷ The total cost for this unbundling, according to AT&T/WorldCom, is \$0.26, although the competitive LEC would also have to buy a "virtual DS1," which is not currently a UNE, and incur a NRC of \$19.20 to serve one to 24 unbundled loops.¹⁵³⁸

600. In the Verizon model, IDLC loops are unbundled by moving an IDLC customer to copper or UDLC, then running jumpers to the MDF and then to the competitive LEC's

¹⁵³⁴ Tr. at 4831-33.

¹⁵³⁵ For example, suppose WorldCom wins an AT&T end-user served over a UNE-Loop. It seems unlikely that the costs of rearranging an MDF jumper from AT&T's to WorldCom's collocation facilities would be substantially different than for a rearrangement from Verizon to WorldCom.

¹⁵³⁶ Verizon Ex. 107, at 335.

¹⁵³⁷ AT&T/WorldCom Ex. 2, at 32; AT&T/WorldCom Ex. 23, Vol. 2, Technical Assumptions Binder, at 98-99.

¹⁵³⁸ AT&T/WorldCom Ex. 23, Vol. 2, Price List.

collocation facilities.¹⁵³⁹ Adding the Field Installation surcharge that applies to all unbundling jobs,¹⁵⁴⁰ Verizon's proposed total NRC for this unbundling is \$260.27.¹⁵⁴¹ Verizon contends that AT&T/WorldCom's proposal is not based on "currently available technology" and would involve a newly defined UNE (virtual DS1 from the RT to the competitive LEC switch).¹⁵⁴²

b. Discussion

601. It is not necessary for us to decide whether AT&T/WorldCom's proposal for unbundling IDLC loops is feasible using current technology. The non-cost portion of this proceeding established a method by which we can decide the appropriate NRC without resolving the question of precisely how to unbundle an IDLC loop. Specifically, Verizon offered not to charge a competitive LEC more for unbundling an IDLC loop than for a copper or UDLC loop in situations where a spare facility is available.¹⁵⁴³ Consequently, we will assume for the purposes of calculating the loop unbundling charge that all loops are copper or UDLC. This would produce a somewhat higher NRC than proposed by AT&T/WorldCom, but one still quite lower than that proposed by Verizon.

6. Migrations (Hot Cuts)

a. Positions of the Parties

602. AT&T/WorldCom propose a simple process for moving a loop from a Verizon switch to a competitive LEC switch. According to AT&T/WorldCom, there are two key steps in transferring a loop. The first step, which may be completed any time before the cutover, consists of placing a new wire from the frame to the competitive LEC's equipment.¹⁵⁴⁴ The second step, which occurs at the negotiated due date and time, is for the Verizon switch to send a translation message deactivating service, and for the CLEC switch to send a message activating the new service.¹⁵⁴⁵ AT&T/WorldCom state that this simple process is adequate and that the additional

¹⁵³⁹ Verizon Ex. 116, at 49. The charge for this activity is \$159.48. See Verizon Ex. 100, Vol. 11, Non-Recurring Costs Summary.

¹⁵⁴⁰ Verizon Ex. 124, at 96.

¹⁵⁴¹ The Field Installation Surcharge is \$100.79. Verizon Ex. 100, Vol. 11, Non-Recurring Costs Summary.

¹⁵⁴² Verizon Ex. 116, at 46-47.

¹⁵⁴³ See *Non-Cost Arbitration Order*, 17 FCC Rcd at 27274, 27317, 27319, paras. 478, 574, 578. This offer is reflected in the agreements between the parties. See, e.g., Agreement between MCIMetro Access Transmission Services, Inc. and Verizon Virginia, Inc., § 3.18 (filed Sept. 3, 2002).

¹⁵⁴⁴ AT&T/WorldCom Ex. 13, at 65.

¹⁵⁴⁵ *Id.*

steps added by Verizon increase the risk of problems.¹⁵⁴⁶

603. In contrast, Verizon outlines a labor intensive, complex process that it claims is necessary to prevent end-user service interruptions.¹⁵⁴⁷ It states that, without these safeguards, “hot cuts” would have caused service interruptions for 11 percent of transferred end-users during a recent month.¹⁵⁴⁸ Verizon contends that AT&T/WorldCom’s proposed simple method is untenable because the processes involved in a hot cut are so complicated that human intervention is necessary to ensure completion of the job without interrupting service to the customer.¹⁵⁴⁹ Verizon also argues that AT&T/WorldCom’s contention that Verizon’s processes are too complicated is “hypocrisy of the highest order” because most of the processes were requested by AT&T/WorldCom or other competitive LECs.¹⁵⁵⁰

b. Discussion

604. Based on the record before us, we adopt AT&T/WorldCom’s hot cut proposal. We agree with AT&T/WorldCom that the process set forth in their model is sufficient in most cases.¹⁵⁵¹ With an efficient OSS in place, there should be limited need for the types of manual coordination activities that Verizon claims are necessary. Our decision to establish the hot cut NRC based on this highly automated process is not in any way intended to prevent competitive LECs from negotiating for (and paying for) a process that includes more manual intervention by Verizon to reduce the risk of error caused by either party.

XI. BROADBAND ISSUES

A. Loop Qualification

1. Introduction

605. Wireline broadband services include services that use xDSL to send signals over

¹⁵⁴⁶ *Id.* at 34 (“Verizon’s process is far more labor intensive, shifts control to a department that is unequipped to discover such problems, and disrupts the efficient work activities that would be available with existing OSS.”).

¹⁵⁴⁷ Verizon Ex. 116, at 23-24 (“These work steps include arranging for the necessary resources to perform work at the Verizon frame (which includes cross-connects and dial-tone checks), the RCMAC work (switch translations), and a technician dispatch if necessary, as well as coordinating the timing of these steps. The RCCC also notifies the CLEC when these tasks are completed and then, after getting the ‘go ahead’ from the CLEC, coordinates the precise timing for cutting service over to the CLEC.”).

¹⁵⁴⁸ Verizon Ex. 124, at 76.

¹⁵⁴⁹ *Id.* at 82.

¹⁵⁵⁰ *Id.* at 80.

¹⁵⁵¹ As noted above, this NRC is not appropriate for designed elements, including 4-wire loops, DS1 loops, DS3 loops, and interoffice transport.

copper wires to packet switches.¹⁵⁵² Loop Qualification is the process of ascertaining loop characteristics such as metallic length and the presence of such impediments to xDSL transmission as load coils, bridged taps, and “disturbers” such as T-1 lines. LECs use these characteristics to determine which, if any, xDSL services they will offer on a particular loop and also what line conditioning might be required to enable various types of xDSL service. Loop qualification may be a simple matter of consulting a database, but it also may require additional research, depending on how much and what type of information is needed.

606. The simplest method of loop qualification is to access the Loop Facility Assignment and Control System (LFACS). This database is now available to competitive LECs electronically at no additional cost¹⁵⁵³ and, in theory, contains extensive data about loop characteristics. The competitive LECs argue that, if LFACS were fully and accurately populated, it would suffice for the vast majority of their loop qualification requirements.¹⁵⁵⁴ Verizon does not directly contest this claim, but it notes that LFACS was designed before xDSL was developed, for other purposes.¹⁵⁵⁵ As a result, LFACS is neither fully populated nor entirely accurate. Thus LFACS is frequently inadequate for qualification purposes.

607. Verizon proposes three methods of loop qualification in addition to LFACS. First, it developed a Mechanized Loop Qualification (MLQ) Database, which contains additional loop information, and for which it proposes a recurring charge. If more detailed information is required for a particular loop, Verizon proposes that a competitive LEC can order Manual Loop Qualification or, for even more detail, an Engineering Query, with associated NRCs for review of paper cable plats.¹⁵⁵⁶ The competitive LECs oppose these charges.

¹⁵⁵² The small “x” before the letters DSL signifies DSL as a generic transmission technology, rather than a particular form of DSL.

¹⁵⁵³ According to Verizon:

A requesting CLEC also can electronically request and receive certain qualification information contained in Verizon VA’s Loop Facility Assignment and Control System (LFACS) database. In fact, in October 2001, Verizon implemented an enhancement to its OSS that provides CLECs with electronic access to loop make-up information (including cable segment lengths and gauges, bridged tap lengths, gauges and locations, load coil locations, and DLC system types) as that information currently exists in the LFACS database. Verizon VA is not proposing any charge for such access at this time.

Verizon Initial Cost Brief at 209 n.228 (citing Verizon Ex. 116, at 55; Verizon Ex. 124, at 149-50).

¹⁵⁵⁴ See AT&T/WorldCom Ex. 13, at 158.

¹⁵⁵⁵ Verizon Ex. 124, at 147-48.

¹⁵⁵⁶ See Verizon Ex. 107, at 126; Verizon Ex. 124, at 144.

2. Positions of the Parties

608. Verizon views its MLQ Database, which it has developed over the past several years, as the “primary means by which CLECs obtain loop qualification information” and asserts that “[a] CLEC that seeks to offer xDSL-based services should be able to get all of the qualification information it needs from the Database.”¹⁵⁵⁷ The Database indicates whether the loop is qualified for xDSL by Verizon’s standards, meaning that “the total loop length, including any bridged tap, is less than 18,000 feet, the loop is not served by DLC, and T-1 is absent from the loop’s binder group.”¹⁵⁵⁸ The data are actually organized by terminal and indicate whether any available loops in the terminal in question are xDSL qualified. If a qualified loop is available in the terminal, the competitive LEC can order xDSL-compatible loops (that is, Verizon can transfer the distribution subloop to make an xDSL-compatible loop).¹⁵⁵⁹ The Database does not necessarily contain all information that may be relevant to all forms of xDSL that a competitive LEC may wish to offer.¹⁵⁶⁰ Verizon argues, however, that “the functionality built into its loop qualification database is more than sufficient for the vast majority of xDSL services. The need for [additional] loop make-up detail should be confined to very, very few cases.”¹⁵⁶¹ Development of this database involves systematic testing using a Mechanized Loop Test (MLT)¹⁵⁶² on a sample of loops from each terminal.¹⁵⁶³ To recover the related costs, Verizon proposes to assess a recurring charge (\$0.26 per month) on all xDSL-capable loops (used by Verizon or by competitive LECs) and line sharing and line splitting arrangements ordered by competitive LECs.¹⁵⁶⁴ Verizon proposes to amortize these costs over a 30-month period, which it asserts represents the “average ‘service life’ for a customer’s use of a retail xDSL-based service.”¹⁵⁶⁵

609. As noted, Verizon also proposes NRCs for a Manual Loop Qualification and an

¹⁵⁵⁷ Verizon Ex. 107, at 127.

¹⁵⁵⁸ *Id.* at 128-29; *see also id.* at 131.

¹⁵⁵⁹ *See id.* at 129.

¹⁵⁶⁰ *See id.* at 131; Verizon Ex. 124, at 145-46; AT&T/WorldCom Ex. 13, at 159-60.

¹⁵⁶¹ Verizon Ex. 124, at 148.

¹⁵⁶² “An MLT test determines the effective length (including any bridged tap and customer and CO wiring) of a loop by measuring its capacitance. The process involves sending a voltage pulse from testing equipment located in an MLT test center, through a central office switch port, and through the loop being tested. Only working loops, *i.e.*, loops connected to a switch port and provided with dial tone, can be MLT-tested.” Verizon Ex. 107, at 128 n.23.

¹⁵⁶³ *Id.* at 129.

¹⁵⁶⁴ AT&T/WorldCom Ex. 13, at 156; Verizon Ex. 107, at 132-33.

¹⁵⁶⁵ Verizon Ex. 107, at 134.

Engineering Query. A Manual Loop Qualification consists of an examination of paper cable plats by an engineering clerk, to obtain more detailed information about a loop than exists in LFACS or in Verizon's new MLQ Database.¹⁵⁶⁶ Specifically, the clerk reviews plats for the presence or absence of both load coils and DLC. The clerk also computes the total loop length, including bridged taps. These characteristics largely determine which, if any, types of xDSL the LEC will offer over the loop (and the quality of service likely to result).¹⁵⁶⁷ The Engineering Query process provides a competitive LEC with additional loop makeup information, including the location and length of bridged taps, the number and location of load coils (if any), the length and gauge of cable segments, the location of the DLC RT and the type of DLC (if present), and the presence of potential T-1 disturbance.¹⁵⁶⁸ Verizon describes this as "an incremental step beyond that of the Manual Loop Qualification."¹⁵⁶⁹

610. Verizon asserts that it is not required to provide this detailed information through a mechanized (electronic) process.¹⁵⁷⁰ Rather than incur the substantial costs of creating such a database, Verizon finds it appropriate that "the costs of paper-record review are imposed in a cost-causative manner only on those CLECs whose services require the additional information."¹⁵⁷¹

611. AT&T/WorldCom claim they are not requesting that Verizon create a "massive and costly" database.¹⁵⁷² They argue that the relevant data for loop qualification should already exist in Verizon's databases:

Incumbents installed loop inventory management databases such as LFACS, in different forms, over 20 years ago. ... [T]he databases contain at least some loop makeup information on each and every loop. Although the incumbents did not fully populate these databases with all the categories of loop makeup data at their inception, it has long been standard within the industry that all plant changes should be input to the databases on a going forward basis. The incumbents' engineering personnel were supposed to enter the modified loop makeup of existing plant into the database any time the plant was altered. ... [T]he necessary loop makeup data for virtually all of the [sic] Verizon's plant should

¹⁵⁶⁶ See *id.* at 137; Verizon Ex. 116, at 55 n.21. The charge would not be assessed on loops in wire centers in which the MLT testing has not been completed. Verizon Ex. 124, at 153.

¹⁵⁶⁷ Verizon Ex. 107, at 137.

¹⁵⁶⁸ *Id.* at 137.

¹⁵⁶⁹ *Id.*

¹⁵⁷⁰ *Id.* at 132.

¹⁵⁷¹ *Id.* at 131.

¹⁵⁷² AT&T/WorldCom Ex. 21, at 61 (quoting Verizon Ex. 116, at 54).

now reside in the relevant databases.¹⁵⁷³

612. In support of this contention, AT&T/WorldCom cite Verizon's own claim that, for 90 percent of recent orders, LFACS contained all needed loop detail, and note that Verizon assumes further improvement to 96 percent (*i.e.*, four percent "fallout").¹⁵⁷⁴ These parties argue that Verizon's new MLQ Database, however, does not include the information that they need and assert that it actually was designed and developed only to meet the needs of Verizon's own retail DSL operations.¹⁵⁷⁵ AT&T/WorldCom request read-only electronic access to Verizon's existing databases (which Verizon states it has now made available): "All that competitors seek is to have read-only access to [the] underlying data ... in LFACS and similar databases."¹⁵⁷⁶

613. The competitive LECs argue that, when necessary loop qualification data are missing, Verizon should promptly correct its database(s) and "provide the information to the requesting carrier, in an expeditious manner, without new charges being imposed on the competitor."¹⁵⁷⁷ In other words, Verizon need not fully populate its database, but it should be required to supply missing information promptly at no charge when it is needed. "To the extent that information needed for loop qualification resides only in Verizon's 'plats' (which are paper plant records), rather than in electronic databases, it reflects Verizon's failure to populate its databases as it should have given the upgrades that Virginia ratepayers have been funding for years."¹⁵⁷⁸

614. AT&T/WorldCom also argue that Verizon's proposed NRCs for the Manual Loop Qualification and the Engineering Query create the wrong incentives: "As long as Verizon can pass along to its competitors the cost of whatever manual, short-run processes it imposes, the company will have every incentive to delay implementation of more efficient, electronic interfaces."¹⁵⁷⁹ Should we find some recovery appropriate for manual loop qualification and engineering queries, these parties assert that their NRC Model can be used to set rates for these processes.¹⁵⁸⁰

¹⁵⁷³ AT&T/WorldCom Ex. 13, at 165.

¹⁵⁷⁴ AT&T/WorldCom Ex. 21, at 62.

¹⁵⁷⁵ AT&T/WorldCom Ex. 13, at 159.

¹⁵⁷⁶ *Id.* at 160.

¹⁵⁷⁷ *Id.* at 166.

¹⁵⁷⁸ *Id.* at 165.

¹⁵⁷⁹ *Id.* at 164.

¹⁵⁸⁰ AT&T/WorldCom Ex. 21, at 56.

3. Discussion

615. As discussed below, we reject some of Verizon's proposed loop qualification charges and substantially reduce other such charges. We agree with AT&T/WorldCom that, if Verizon had followed standard practices or its own procedures, it would have populated the LFACS database much more fully. Thus, if adopted, Verizon's proposed loop qualification charges would recover costs made necessary by its own failures. The proposed charges also reflect some inefficient manual procedures and other procedures designed primarily for Verizon's own retail purposes. We do not believe that an efficient, forward-looking network would incur such costs and, accordingly, Verizon should not be permitted to impose the associated charges on its competitors.

616. We agree with AT&T/WorldCom that the MLQ Database is of limited value to competitive LECs and appears to have been designed primarily for Verizon's retail xDSL operations. Although Verizon evidently intends to offer only limited, basic forms of xDSL, competitive LECs may wish to offer more advanced forms and thus require more loop makeup detail. Accordingly, we reject Verizon's proposed recurring charge.¹⁵⁸¹

617. With respect to the Manual Loop Qualification and Engineering Query NRCs, assuming competitive LECs do now have full electronic access to the data in LFACS, as Verizon indicates in the record, the need for manual qualification should be fairly rare. We take notice of the finding of the New York Commission that, if Verizon had followed its own procedures in recent decades, LFACS would contain the needed data for a higher proportion of orders.¹⁵⁸² Thus, allowing Verizon to impose its proposed manual charges would permit it to impose the costs of its own inefficiency on its competitors and does not provide proper incentives to develop efficient procedures.

¹⁵⁸¹ There are, moreover, a number of difficulties with Verizon's computation of the proposed charge. For example, amortization over 30 months assumes that neither Verizon nor another carrier will ever use the line for DSL services again, which seems unlikely. If we were to conclude that Verizon's proposed charges reflect more than mere corrections of Verizon's past failures to follow its own stated procedures, they should be viewed as something in the nature of a permanent improvement that should be amortized over a substantially longer period (such as the remaining life of the loops).

¹⁵⁸² In the New York DSL proceeding, the administrative law judge found that, if Verizon had followed its own database procedures over recent decades in recording additions and modifications to loops, LFACS would contain much more of the needed data, and thus would suffice for a significantly greater percentage of loops. *Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements*, Case 98-C-1357, ALJ Recommended Decision at 165 (May 16, 2001) (*New York ALJ DSL Recommended Decision*), *aff'd*, Order on Unbundled Network Element Rates at 132-33 (Jan. 28, 2002) (*New York Commission DSL Decision*). For this reason, and to provide Verizon with an incentive to improve its database and implement efficient procedures, the New York administrative law judge recommended substantial reductions in Verizon's proposed loop qualification rates. *New York ALJ DSL Recommended Decision* at 165. The New York Commission affirmed the ALJ's recommendation, which, it found, explained "why the rate was being set toward the low end of the range of reason for these costs." *New York Commission DSL Decision* at 132-33.

618. At the same time, requiring Verizon to perform manual loop qualification at no charge may encourage excessive or frivolous requests from competitive LECs in situations in which the data may be of little value to them. Accordingly, we permit Verizon to impose charges for Manual Loop Qualification and an Engineering Query, but not at the levels it proposes. Verizon's proposed charges for these NRCs (\$114.52 and \$139.42, respectively)¹⁵⁸³ are calculated using the same methodology that we rejected with respect to other NRCs, leading us to conclude that they are overstated.¹⁵⁸⁴ The record in this proceeding does not, however, contain information that would provide a reasonable basis for reducing these charges.¹⁵⁸⁵ As with other NRCs, therefore, we direct AT&T/WorldCom to add these NRCs to their model and calculate the charges accordingly. That is, we direct AT&T/WorldCom to add these NRCs to their model using their methodology. This should produce charges considerably lower than those proposed by Verizon, thus providing an incentive for Verizon to improve its database and implement efficient procedures but also some disincentive for competitive LECs to make unneeded requests.

B. Wideband Testing

1. Introduction

619. Verizon proposes a monthly recurring charge of \$2.19 per xDSL capable loop¹⁵⁸⁶ to recover the costs of its Wideband Test System (WTS). WTS is the equipment and associated operational support used to ensure that a loop, from the end-user customer to the DSLAM, is capable of supporting the desired services. WTS isolates problems to either the data or the voice layer. Verizon uses the Hekimian testing system in Virginia, which has remote and spectrum testing capabilities.¹⁵⁸⁷

2. Positions of the Parties

620. Verizon asserts that use of WTS minimizes costs associated with the dispatch of service technicians to central offices and customer locations to check trouble reports, which may involve problems unrelated to the loop. "Without reliable test results, Verizon would have no choice but to dispatch a technician to try to isolate every reported trouble, which would be a

¹⁵⁸³ See AT&T/WorldCom Ex. 13, at 156; Verizon Ex. 124 at 144.

¹⁵⁸⁴ See *supra* section X(B)(2).

¹⁵⁸⁵ Although AT&T/WorldCom, as noted above, argue that LFACS data are currently sufficient for about 90 percent of orders and that Verizon expects to be able to improve this to 96 percent, it is not entirely clear that AT&T/WorldCom refer only to xDSL orders or to the LFACS data required to evaluate a loop's xDSL potential. In fact, this statement appears to refer to all orders. Thus the present record does not appear to provide a reliable basis for specifying a particular further rate reduction.

¹⁵⁸⁶ AT&T/WorldCom Ex. 13, at 103.

¹⁵⁸⁷ Verizon Ex. 107, at 150.

misuse of limited technician resources and highly inefficient.”¹⁵⁸⁸ Although competitive LECs are free to do their own testing, Verizon argues that, before provisioning the loop, it still must perform its own testing “to ensure the loop is functioning free of spectrum or noise problems.”¹⁵⁸⁹ Verizon further argues that “[i]t is fundamentally unfair for AT&T/WorldCom to seek to hold Verizon VA to high wholesale service standards, while refusing to contribute to the cost of achieving such standards.”¹⁵⁹⁰

621. AT&T/WorldCom argue that Verizon has provided no justification for recovering from competitors the costs of the Hekimian system.¹⁵⁹¹ Further, because competitive LECs frequently provide their own testing systems (testing capability is normally built into the DSLAM), these carriers complain that Verizon is asking them to pay twice for testing.¹⁵⁹² Accordingly, they argue that competitors should have to pay for access to Verizon’s wideband testing capability system *only* if they choose to use it and *only* if Verizon provides full access to it.¹⁵⁹³ AT&T/WorldCom note that both the New York and Massachusetts Commissions found that competitors, not Verizon, will bear the consequences of their decisions to opt out of Verizon’s WTS if this results in additional dispatches.¹⁵⁹⁴

3. Discussion

622. We agree with AT&T/WorldCom that competitive LECs that provide their own testing system should not be required to pay for Verizon’s WTS. Accordingly, AT&T/WorldCom will pay Verizon’s proposed recurring charge only if they elect to use Verizon’s WTS.¹⁵⁹⁵ Further, should they choose not to use Verizon’s system, they will be responsible for additional service dispatches that are not caused by problems on the Verizon

¹⁵⁸⁸ *Id.* at 151-52.

¹⁵⁸⁹ Verizon Ex. 124, at 106-07.

¹⁵⁹⁰ *Id.* at 105-06.

¹⁵⁹¹ AT&T/WorldCom Ex. 13, at 104.

¹⁵⁹² *See id.* at 105, 115.

¹⁵⁹³ *Id.* at 105.

¹⁵⁹⁴ *Id.* at 112 (citing *Proceeding on Motion of the Commission to Examine New York Telephone Company’s Rates for Unbundled Network Elements*, Case No. 98-C-1357, Opinion and Order Concerning Line Sharing Rates at 26 (New York Commission May 26, 2000) (*New York Commission Line Sharing Order*); *Verizon New England, Inc. dba Verizon Massachusetts*, Decision T.E. 98-57-Phase III at 76 (Massachusetts Commission Sept. 29, 2000) (*Massachusetts Commission Line Sharing Order*)).

¹⁵⁹⁵ *See New York Commission Line Sharing Order* at 25-26. Because all competitive LECs are not required to use (or pay for) WTS, we expect that the resulting charge for the optional service will be based upon reduced demand. This, in turn, should result in a rate higher than the rate originally projected, which would have been imposed on all competitive LECs. We direct Verizon to recalculate its proposed charge in accordance with our decision.

lines.¹⁵⁹⁶ Finally, they cannot hold Verizon to the same performance metrics as on lines on which Verizon performs this testing.¹⁵⁹⁷

C. Line-sharing OSS

1. Introduction

623. Verizon proposes a monthly per line recurring charge of \$0.84 for line-sharing OSS.¹⁵⁹⁸ Verizon divides these OSS costs into three categories: (1) those to be shared between line sharing and line splitting; (2) those related to internal ordering and billing OSS that are shared by line splitting and line sharing; and (3) those to be shared among line sharing, line splitting, and subloop unbundling.¹⁵⁹⁹ Verizon amortized its capital costs over five years.¹⁶⁰⁰

2. Positions of the Parties

624. Verizon explains that it engaged Telcordia “to enhance its provisioning and inventory systems to recognize the particular requirements for line sharing, line splitting, and subloop service offerings for CLECs.”¹⁶⁰¹ The OSS costs associated with line sharing “include the amortization of one-time expenses in connection with the required Telcordia-provided OSS software for line sharing (and its associated installation and testing), which was necessary to enhance Verizon VA’s inventory systems to recognize line sharing.”¹⁶⁰²

625. The OSS costs incorporated in Verizon’s cost study include Telcordia costs to enhance the LFACS and the Service Order Analysis and Control (SOAC) software and the costs associated with Telecom Group Systems (TGS) or Information Systems for expansion and enhancement of the pre-ordering, ordering, and billing systems.¹⁶⁰³ Verizon claims that these enhancements were required for the systems to recognize that line sharing and line splitting arrangements involve more than one service provider. Further, Verizon states that enhancements were made to the Loop Engineering Information System (LEIS), the LEAD system, the Network

¹⁵⁹⁶ See *id.* at 26-27.

¹⁵⁹⁷ See *id.* at 27.

¹⁵⁹⁸ AT&T/WorldCom Ex. 13, at 116.

¹⁵⁹⁹ Verizon Ex. 124, at 111.

¹⁶⁰⁰ *Id.*

¹⁶⁰¹ Verizon Ex. 107, at 147.

¹⁶⁰² *Id.* at 146.

¹⁶⁰³ *Id.* at 147-48.

and Services Data Base (NSDB), and the Provisioning Analyst Workstation.¹⁶⁰⁴

626. AT&T/WorldCom argue that, like its support for its more general OSS study, Verizon's cost support for its line sharing OSS study is inadequate.¹⁶⁰⁵ They argue that the Commission should hold Verizon to a strict burden of proof to justify cost recovery claims for modifications to its OSS in connection with line sharing.¹⁶⁰⁶ They claim that Verizon has not met this burden.¹⁶⁰⁷

627. Should the Commission decide to use Verizon's proposed cost study for line sharing OSS, however, AT&T/WorldCom recommend two modifications. First, they ask that the Commission direct Verizon to remove software maintenance costs from the line sharing OSS cost study. They contend that Verizon's markup for annual ongoing software maintenance is inappropriate, given its admission that it does not separately track ongoing maintenance costs for OSS projects.¹⁶⁰⁸ Accordingly, AT&T/WorldCom state that Verizon should move software maintenance costs into general ACFs and recover these costs, like other ongoing OSS costs, over all lines.¹⁶⁰⁹ Second, these carriers argue that the ten-year amortization that applies to costs for access to OSS should also apply here. As Verizon itself acknowledges with respect to access to OSS, use of a ten-year period would "mitigate the impact on competing carriers and spread the costs among a relatively large number of CLECs."¹⁶¹⁰ Along with the corrections to Verizon's ACF factors, which are advocated by AT&T/WorldCom's Recurring Cost Panel in reply testimony, these modifications would result in a charge of \$0.54 per month per line.¹⁶¹¹

3. Discussion

628. We conclude that it is appropriate to allow Verizon to recover the costs that it incurred to enhance its line-sharing OSS through the proposed per line recurring charge, but as modified by some of AT&T/WorldCom's requests. Specifically, we direct the parties to apply the same amortization period as is used for other OSS and to remove line sharing OSS costs from

¹⁶⁰⁴ *Id.* at 148.

¹⁶⁰⁵ AT&T/WorldCom Ex. 13, at 116.

¹⁶⁰⁶ *Id.* at 118-19.

¹⁶⁰⁷ *Id.* at 119.

¹⁶⁰⁸ *Id.* at 117 (citing Verizon Ex. 107, at 276).

¹⁶⁰⁹ Consequently, AT&T WorldCom state that Verizon should not back out these costs from its ACF calculation. See AT&T/WorldCom Ex. 12, at 94.

¹⁶¹⁰ AT&T/WorldCom Ex. 13, at 117-18 (quoting Verizon Ex. 107, at 252).

¹⁶¹¹ *Id.* at 119.

the calculation of ACFs.¹⁶¹²

D. Cooperative Testing

1. Introduction

629. Verizon proposes a NRC of \$30.78 for cooperative testing.¹⁶¹³ In cooperative testing, which would occur only upon the request of a competitive LEC in the course of initial provisioning of an xDSL line, a Verizon field technician works with the competitive LEC to test and trouble-shoot the line.¹⁶¹⁴ Cooperative testing is normally performed from the end-user's premises and may also require the participation of a frame technician at the central office.¹⁶¹⁵ Cooperative testing supplements the standard testing performed in conjunction with provisioning.¹⁶¹⁶

2. Positions of the Parties

630. Verizon asserts that cooperative testing, which is performed only at the request and direction of a competitive LEC, involves the expenditure of time by a Verizon technician.¹⁶¹⁷ Verizon argues that this testing eliminates the need for a competitive LEC to dispatch its own technician and thus benefits the competitive LEC, which should pay for it.¹⁶¹⁸

631. AT&T/WorldCom argue that the Commission should reject this charge. According to them, cooperative testing "was established in New York because Verizon-New York was providing many DSL-capable loops to competitors that did not even meet basic continuity requirements."¹⁶¹⁹ They note that the Massachusetts¹⁶²⁰ and Maryland¹⁶²¹ Commissions

¹⁶¹² See *supra* sections VII(C) and III(E)(3)(c).

¹⁶¹³ AT&T Ex. 13 (Talbot Direct), at 139.

¹⁶¹⁴ See Verizon Ex. 107, at 142-44; Verizon Ex. 124, at 128.

¹⁶¹⁵ See Verizon Ex. 107, at 142-43.

¹⁶¹⁶ Verizon Ex. 124, at 128.

¹⁶¹⁷ *Id.*

¹⁶¹⁸ *Id.*

¹⁶¹⁹ AT&T/WorldCom Ex. 13, at 140.

¹⁶²⁰ "[I]t is inappropriate to permit Verizon to levy a 'cooperative testing' charge on CLECs, which is based on costs that are caused by provisioning difficulties experienced by both Verizon and CLECs for stand-alone xDSL loops The record shows that CLECs already incur their own cost for the cooperative test. Moreover, the record is clear that Verizon believes such testing is 'mutually beneficial'; therefore, Verizon should share in the cost of cooperative testing by absorbing all of its own costs associated with this test as CLECs do Finally, the Department agrees that shifting the costs of this test to CLECs relieves Verizon of an incentive to improve its loop performance." *Massachusetts Line Sharing Order* at 113, cited in AT&T/WorldCom Ex. 13, at 140-41 n.148.

rejected Verizon's proposed cooperative testing charge, reasoning that each party should bear its own costs and that the proposed charge would enable Verizon to shift the costs of its own inefficiency to its competitors. AT&T/ WorldCom argue, in accordance with these decisions, that, if Verizon's own provisioning difficulties create the need for cooperative testing, its competitors should not be forced to pay for cooperative testing and thus bear the costs of Verizon's inefficiencies.¹⁶²²

3. Discussion

632. We agree with AT&T/WorldCom and reject Verizon's proposed cooperative testing charge. To the extent that Verizon is obligated to provide an xDSL-capable loop,¹⁶²³ its competitors should not have to pay an additional charge when Verizon does not meet its obligation. We find that disallowing Verizon's charge for cooperative testing should provide the correct incentive to Verizon to provision its xDSL lines efficiently.

E. Loop Conditioning Issues

1. Introduction

633. Loop conditioning is the process of removing impediments to xDSL transmission to enable a loop to carry xDSL service. Verizon proposes NRCs for loop conditioning to remove load coils¹⁶²⁴ and bridged taps.¹⁶²⁵ It also proposes a charge, to be imposed on each conditioning

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¹⁶²¹ "The Commission finds that each party should bear its own costs with respect to Cooperative Testing. Both parties, the ILEC and the CLEC, enjoy the benefits of engaging in cooperative testing and, as such, it would be grossly unfair to require CLECs to bear the burden of paying for their costs as well as for Verizon's. Additionally, Verizon, not the CLEC, has the duty and obligation of delivering a functioning high frequency portion of the loop to the CLEC ordering the line sharing UNE. Verizon's argument that cooperative testing is necessary for it to comply with this obligation is not compelling. The Commission believes that the proper allocation of the costs for cooperative testing is for each party to shoulder its own expenses." *Rhythms Links, Inc. v. Bell Atlantic-Maryland, Inc.*, Case No. 8842, Phase II, Order No. 76852 at 39 (Maryland Commission Apr. 3, 2001) (*Maryland Digital Line Sharing Rate Order*), clarified on denial of reconsideration, Order No. 77074 (Maryland Commission June 29, 2001), cited in AT&T/WorldCom Ex. 13, at 141 n.149.

¹⁶²² AT&T/WorldCom Ex. 13, at 140.

¹⁶²³ *Triennial Review Order*, section VI(A)(4)(a)(v).

¹⁶²⁴ A load coil is an inductor that is connected into a loop in order to improve its voice transmission characteristics. *New York 271 Order*, 15 FCC Rcd at 4088 n.828.

¹⁶²⁵ A bridged tap is any portion of a loop that is not in the direct talking path between the central office and the service users' terminating equipment. For example, a bridged tap may be an extension of the circuit beyond the service user's location. See *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Memorandum Opinion and Order, and Notice of Proposed Rulemaking, 13 FCC Rcd 24012, 24086 n.316 (1998) (*Advanced Services Order and NPRM*) (subsequent history omitted). It permits the appearance of the loop at a number of alternative servicing terminal locations, which gives the telephone company greater flexibility in reassigning a telephone number to a different address without rearranging existing facilities. (continued....)

task, for an engineering work order. The engineering work order is a detailed plan for performing the conditioning task and recording it in database records and on cable plats.¹⁶²⁶

2. Positions of the Parties

634. Verizon proposes to impose a NRC for loop conditioning only in extraordinary cases and will recover ordinary conditioning in recurring charges that cover normal network maintenance. Verizon argues that this policy accommodates provision of xDSL services of the varieties and qualities that it considers appropriate and that competitive LECs wishing to offer other xDSL services should bear the cost of any extraordinary conditioning that may be needed.¹⁶²⁷ In accordance with its proposal policy, Verizon would not impose a NRC for load coil removal below 18,000 feet.¹⁶²⁸ Verizon explains that “where load coils are present on copper loops longer than 18,000 feet, the load coils generally cannot be removed because they are necessary for the circuits to function at voice grade standards. Verizon VA does not condition such loops for itself, but it will do so in the relatively rare case that a CLEC requests it.”¹⁶²⁹ Similarly, because xDSL technologies are generally designed to operate with up to 6,000 feet of bridged tap, Verizon proposes to remove bridged taps as normal network maintenance (*i.e.*, recovering the costs through ACFs rather than NRCs) only on loops with more than 6,000 feet of bridged taps.¹⁶³⁰ Verizon contends that its proposed NRCs are legitimate and are cost justified.

635. In addition to the charges for the actual conditioning work, Verizon proposes to impose an engineering work order charge in excess of \$600 on each conditioning task.¹⁶³¹ This charge would cover the cost of certain work associated with loop conditioning, such as verifying facilities availability, writing the work order, preparing the special bill generated as a result of construction, and updating records.¹⁶³² Verizon would impose the full charge even where the competitive LEC has previously ordered an Engineering Query (discussed above), because the loop information might have changed since the competitive LEC placed the original order.¹⁶³³ On surrebuttal, Verizon challenges AT&T/WorldCom’s expert’s forward-looking estimate of the

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New York 271 Order, 15 FCC Rcd at 4088 n.829. In order to provide xDSL, bridged taps generally have to be removed. *See Advanced Services Order and NPRM*, 13 FCC Rcd at 24086 n.316.

¹⁶²⁶ *See* Verizon Ex. 107, at 140-41.

¹⁶²⁷ *See id.* at 126-27; Verizon Initial Cost Brief at 203-04.

¹⁶²⁸ *See* Verizon Ex. 107, at 126-27.

¹⁶²⁹ Verizon Initial Cost Brief at 204.

¹⁶³⁰ *Id.* (citing Tr. at 5000, 5027-28); *see also* Verizon Ex. 107, at 126-27.

¹⁶³¹ *See* AT&T Ex. 13, at 144.

¹⁶³² *See* Verizon Ex. 107, at 140-41.

¹⁶³³ *See id.* at 141-42.

labor required to perform an engineering work order.¹⁶³⁴

636. AT&T/WorldCom argue, first, that an efficient, forward-looking network does not include inhibitors, such as load coils and excessive bridged taps, and that loops in such a network need not be "deconditioned" to carry DSL-based services.¹⁶³⁵ They claim that the premise that these inhibitors must be removed to render a loop suitable for the provision of DSL-based services applies to Verizon's embedded network and violates network engineering guidelines that have been in place since 1980.¹⁶³⁶ Second, they contend that they pay recurring loop rates that recover the costs of a forward-looking network in which conditioning is unnecessary.¹⁶³⁷ Thus, according to AT&T/WorldCom, they cannot also be charged NRCs for these activities because the Commission's rules prohibit recovering "more than the total, forward-looking economic cost of providing the applicable element."¹⁶³⁸

637. Even if some NRC is appropriate, AT&T/WorldCom argue that a forward-looking network is designed to meet Carrier Service Area (CSA) guidelines and that a NRC should not be applied for bridged tap removal unless requested on loops with less tap than allowed under the CSA standards.¹⁶³⁹ These standards specify that bridged taps not exceed 2,500 feet, with no single tap longer than 2,000 feet.¹⁶⁴⁰ AT&T/WorldCom also contend that, due to inefficient methods and general flaws in Verizon's NRC Model, its cost study exaggerates the costs associated with removing load coils and bridged taps.¹⁶⁴¹ In particular, AT&T/WorldCom argue that, if the Commission allows line conditioning NRCs, it should assume that conditioning is performed on a batch basis of 25 or 50 lines at a time, rather than one line at a time as assumed by Verizon.¹⁶⁴² This would, of course, result in greatly reduced charges.

638. AT&T/WorldCom also challenge Verizon's proposed procedures and methodology for its proposed engineering work order. They argue that this is among the most

¹⁶³⁴ Verizon Ex. 124, at 141-43.

¹⁶³⁵ See AT&T/WorldCom Ex. 8, at 54, 58; AT&T/WorldCom Ex. 13, at 145 n.154.

¹⁶³⁶ See AT&T/WorldCom Ex. 8, at 54, 58; AT&T/WorldCom Ex. 13, at 145.

¹⁶³⁷ See AT&T/WorldCom Ex. 21, at 58-59.

¹⁶³⁸ AT&T/WorldCom Ex. 8, at 58-61 (citing, *inter alia*, 47 C.F.R. 51.507(e)); see also AT&T/WorldCom Ex. 13, at 145-46.

¹⁶³⁹ See AT&T/WorldCom Ex. 8, at 54. The CSA standard was adopted in 1980, but it is implemented only as plant is installed or rebuilt. See AT&T/WorldCom Ex. 6, at 5-7; AT&T/WorldCom Ex. 13, at 143 n.152; Verizon Ex. 124, at 132.

¹⁶⁴⁰ AT&T WorldCom Ex. 6, at 7; Verizon Ex. 124, at 132.

¹⁶⁴¹ AT&T/WorldCom Ex. 13, at 148-50 and Attach. A.

¹⁶⁴² *Id.* at 150-51 and Attach. A.

severely overstated of all Verizon's proposed NRCs.¹⁶⁴³ They present a restated estimate by an expert that purports to show that an efficient, forward-looking estimate would be a bit less than five percent of Verizon's estimate.¹⁶⁴⁴ In addition, they would allow only one engineering work order charge per service order for loop conditioning.¹⁶⁴⁵

3. Discussion

639. We allow Verizon to recover loop conditioning costs through NRCs, as specified below. AT&T/WorldCom argue that loop conditioning is unnecessary in a forward-looking network, and thus such costs are unrecoverable. We acknowledge that these carriers highlight a possible tension between our TELRIC pricing rules,¹⁶⁴⁶ which apply to both recurring and non-recurring costs, and prior decisions of this Commission with respect to loop conditioning. We act here under authority delegated to us by the Commission, which has specifically stated that requesting carriers "bear the cost of compensating the incumbent LEC for [loop] conditioning," even though a contemporary network might not require such conditioning.¹⁶⁴⁷ Although we find reasonable Verizon's proposal to charge loop conditioning NRCs only in "extraordinary" cases, we find its proposed charges are unsustainable for the same reasons we reject its other proposed NRCs, *i.e.*, Verizon substantially overstates forward-looking costs.¹⁶⁴⁸ Accordingly, as with other NRCs, we direct AT&T/WorldCom to add loop conditioning to their model, as discussed below.

640. AT&T/WorldCom assert that load coils are typically removed on a batch basis, that is, entire binder groups at a time.¹⁶⁴⁹ Such batch conditioning yields a much lower cost per

¹⁶⁴³ *Id.* at 79-91, 148-150, and Attach. A.

¹⁶⁴⁴ *See id.*, Attach. A.

¹⁶⁴⁵ *See id.* at 152.

¹⁶⁴⁶ *See, e.g.*, 47 C.F.R. §§ 51.505(b)(1), 51.507(e).

¹⁶⁴⁷ *See Local Competition First Report and Order*, 11 FCC Rcd at 15692, para. 382, *cited in* Verizon Initial Cost Brief at 204 n.221. *But see Maryland Digital Line Sharing Rate Order* at 34-35, *cited in* AT&T/WorldCom Ex. 13 at 147 (denying recovery for load coil removal because FCC rulings relevant only "to states that have assumed copper feeder for purposes of calculating forward looking costs."); *Massachusetts Commission Line Sharing Order* at 87 ("The FCC has not directed states to assume copper feeder in calculating TELRIC, and, without such a directive, it would be illogical for the FCC to mandate the recovery of costs that are relevant only to a network assumption that may not have been approved in a particular state.").

¹⁶⁴⁸ *See supra* section X(B)(2); *cf. New York ALJ DSL Recommended Decision* at 162 (allowing the "concept of Verizon's loop conditioning charges," subject to corrections necessitated by flaws the ALJ found in Verizon's development of these charges and "to possible prospective change in light of the reexamination of DSL provisioning technology"), *aff'd New York Commission DSL Decision*.

¹⁶⁴⁹ *See* AT&T/WorldCom Ex. 13, Attach. A. A "binder group" is a group of 25 or 50 pairs bound by a thin color-coded ribbon within a copper cable sheath. *Id.* at n.1.

line because, as AT&T/WorldCom illustrate,¹⁶⁵⁰ many of the steps required in conditioning (for example, travel, set up, opening the splice case) need be performed only once to condition either a single line or an entire binder group. Verizon does condition loops shorter than 18,000 feet on a batch basis.¹⁶⁵¹ These short loops, however, are not at issue here, because Verizon recovers the costs of conditioning them in its recurring charges as part of its network maintenance. Accordingly, Verizon does not seek additional recovery through NRCs for these lines. The proposed NRC for load coil removal would apply only to loops longer than 18,000 feet. Thus the question is whether it is feasible to condition these longer loops on a batch basis.

641. Based on the record before us, we conclude that batch load coil removal is not feasible for loops longer than 18,000 feet. Demand for DSL services on such longer loops is lower because, under currently deployed technology, most forms of DSL services do not work well (*i.e.*, attained speeds are low) at distances greater than 18,000 feet.¹⁶⁵² Moreover, if the loop is longer than 18,000 feet, removal of load coils renders the loop unusable for voice service.¹⁶⁵³ Further, as distance from the switch increases, the probability of finding an entire binder group in which no pair is carrying voice service becomes very low.¹⁶⁵⁴ This makes batch coil removal on long loops impractical.¹⁶⁵⁵ Thus, although batch conditioning appears feasible and efficient for shorter loops, it does not appear feasible for the longer loops for which Verizon is proposing to charge a NRC. Accordingly, for loops longer than 18,000 feet, we direct the parties to assume conditioning of one loop at a time¹⁶⁵⁶ because batch load coil removal is unlikely to be feasible for the long loops to which the charge would apply.

642. We also permit Verizon to charge for bridged tap removal, but we agree with AT&T/WorldCom that Verizon may impose this charge only when the bridged tap is within the

¹⁶⁵⁰ See *id.*, Attach. A, at paras. 11-12.

¹⁶⁵¹ Tr. at 4994.

¹⁶⁵² This conclusion may be modified in the future as new technology extends the reach of xDSL. See, *e.g.*, Brian Hammond, *NECA Study Sees Cost of Rural Broadband Declining*, TR DAILY, Apr. 28, 2003 (suggesting that new repeater technology will soon be available that may extend the “reach” of xDSL to distances as great as 100,000 feet).

¹⁶⁵³ Tr. at 4994.

¹⁶⁵⁴ See *id.* at 4994-97; 5005-07.

¹⁶⁵⁵ See Verizon Initial Cost Brief at 207-08; see also Verizon Ex. 124, at 135 (“As a result of tapering at ... distances [farther than 18,000 feet from the wire center] cable cross-section sizes are substantially smaller than those closer to the office and certainly less likely to have completely spare 25-pair loaded complements that could be unloaded at the same time.”).

¹⁶⁵⁶ It is conceivable that in some cases two or more loops might be conditioned at once, but there is no record evidence to support such a finding. In a future proceeding, however, a party could attempt to demonstrate that, on average, more than one loop is conditioned at a time, and thus that certain elements of the cost should be allocated among several loops.

current CSA standards. In other words, when the tap does not exceed 2,500 feet, with no single tap longer than 2,000 feet and the competitive LEC seeks removal, the competitive LEC will have to pay a removal charge. Verizon advocated and we agreed to apply CSA standards to recurring charges for loop design.¹⁶⁵⁷ Moreover, Verizon argues with respect to load coils that it “proposes recovery of costs for line conditioning through a NRC if -- and only if -- a CLEC requests conditioning that exceeds Verizon’s network design standards.”¹⁶⁵⁸ This argument applies with equal force to bridged taps. We also note that Verizon’s proposal to remove bridged taps as normal network maintenance only on loops with more than 6,000 feet of bridged taps would benefit very few loops.¹⁶⁵⁹ Accordingly, we apply the CSA standards to bridged taps. We reject Verizon’s NRC Model computation of the bridged tap charge for the same general reasons that we rejected its computation for load coil removal and other NRCs. We direct AT&T/WorldCom to estimate this cost assuming conditioning of one loop at a time, because batch conditioning also is unlikely to be feasible for bridged tap removal.¹⁶⁶⁰

643. We find persuasive AT&T/WorldCom’s criticisms of Verizon’s engineering work order estimate. Their restated calculation is more credible than Verizon’s, which is based on its NRC Model, rejected elsewhere in this order.¹⁶⁶¹ Accordingly, we allow a single engineering work order charge per service order, using AT&T WorldCom’s calculations.

644. Finally, we note that paragraph 751 of the *Local Competition First Report and Order*¹⁶⁶² requires a rebate or other cost sharing arrangement where, as here, Verizon performs and charges for non-recurring activities that may in the future benefit other competitive LECs, or Verizon’s own xDSL service. Given the churn for this type of service, we find such subsequent benefits likely to occur. Although neither party proposed a method to implement such cost-sharing,¹⁶⁶³ we direct the parties to do so in their compliance filings.

¹⁶⁵⁷ See *supra* section IV(C)(2)(f). We also note that Verizon should have been applying these standards for any new plant installed in the past two decades. See AT&T/WorldCom Ex. 6, at 7; AT&T WorldCom Ex. 13, at 143 n.152.

¹⁶⁵⁸ Verizon Initial Cost Brief at 203-04.

¹⁶⁵⁹ Less than five percent of loops nationwide contain more than 6,000 feet of bridged taps, according to a 1983 survey. See AT&T Ex. 122, at Fig. 12-6 (Bridged-Tap Length Distribution) (2000). Presumably there would be even fewer today.

¹⁶⁶⁰ See Verizon Initial Cost Brief at 207-08 (and authority cited therein); see also *supra* note 1656.

¹⁶⁶¹ See *supra* section X(B)(2).

¹⁶⁶² 11 FCC Rcd at 15876, para. 751.

¹⁶⁶³ See Tr. at 5017-21, 5030-44 (discussing implementation of paragraph 751).

F. NRCs for Establishing Line Sharing

1. Introduction

645. Verizon proposes certain NRCs for establishing line sharing. These charges would recover the cost of re-arranging cross-connects in the central office to insert a splitter, and to connect the high frequency portion of the loop to a competitive LEC's collocation facility.

2. Positions of the Parties

646. Verizon bases its line-sharing NRC on its NRC for a new UNE loop. Verizon explains that line sharing requires the disconnection of an existing cross-connect on the MDF and the establishment of two new cross-connects. It claims that Verizon's charges for these cross-connects are the same as the central office wiring charge of a two-wire initial loop (\$35.10) for the first cross-connect, and the same as a two-wire additional loop central office wiring charge (\$19.87) for the second.¹⁶⁶⁴

647. AT&T/WorldCom argue that Verizon overstates the line sharing NRC. First, several steps related to confirming that a line is functioning cannot be necessary, because line sharing always involves an already working line.¹⁶⁶⁵ Still other activities appear unnecessary because they should be performed by the line sharing OSS, for which Verizon imposes a separate charge.¹⁶⁶⁶ Finally, these carriers argue that Verizon's line sharing NRC suffers from the flaws of the Verizon NRC Model, discussed at section X(B)(2) of this order.¹⁶⁶⁷

3. Discussion

648. We allow Verizon to impose a NRC for establishing line sharing, but subject to AT&T/WorldCom's proposed adjustments. These adjustments are reasonable because we find that Verizon overstates the non-recurring costs associated with implementing line sharing and because Verizon already recovers some of these costs through the line-sharing OSS charge. Because, for reasons stated elsewhere in this order, we reject Verizon's NRC model,¹⁶⁶⁸ we direct AT&T/WorldCom to calculate the line-sharing NRC using their model. Although AT&T/WorldCom did not propose a NRC for establishing line sharing, these parties state that their model can produce any other NRCs as needed.¹⁶⁶⁹

¹⁶⁶⁴ See Verizon Ex. 107, at 153.

¹⁶⁶⁵ AT&T/WorldCom Ex. 13, at 122.

¹⁶⁶⁶ *Id.* at 123.

¹⁶⁶⁷ *Id.* at 121.

¹⁶⁶⁸ See *supra* section X(B)(2).

¹⁶⁶⁹ AT&T/WorldCom Ex. 21, at 56.

G. Splitter-related Charges

1. Introduction

649. Carriers providing xDSL services use a passive filter, or splitter, to split the digital and voice signals and direct them to the packet-switched network and circuit-switched network, respectively. The competitive LECs purchase the splitter.¹⁶⁷⁰ Verizon proposes three splitter-related charges. Two are alternative recurring charges, which recover costs for administrative and support functions within Verizon's network. Verizon also proposes a one-time installation charge, if the competitive LEC asks Verizon to install the splitter.¹⁶⁷¹

2. Positions of the Parties

650. Under the first option (Option C), the competitive LEC purchases the splitter and either Verizon or a Verizon-approved vendor installs it in Verizon's central office space and Verizon maintains and supports it.¹⁶⁷² Under this Option, Verizon proposes a recurring charge for splitter administration and support which contains ACF-type components: a network maintenance factor (to recover splitter repair, maintenance, and similar expenses), a wholesale marketing factor (to recover "product management, advertising and customer-interfacing functions associated with the wholesale market"), and a support factor (to recover a range of support functions such as information management, research and development).¹⁶⁷³ Verizon contends that "it is entirely appropriate to recover administration and support expenses, even when the CLEC owns the splitter. Verizon VA incurs these general expenses for *all* UNEs. There is no reason that a CLEC who chooses to own the splitter should avoid these costs."¹⁶⁷⁴ Verizon argues that, even though it has no investment in the splitter, the competitive LEC's investment serves as a proxy or surrogate base for estimating these recurring costs.¹⁶⁷⁵

651. Under the second option (Option A), the competitive LEC purchases and installs the splitter in its collocation cage.¹⁶⁷⁶ Verizon also proposes to charge for administrative and support functions under Option A.¹⁶⁷⁷ As with Option C, Verizon explains that it assesses these

¹⁶⁷⁰ See Verizon Ex. 107, at 153-54.

¹⁶⁷¹ See *id.* at 155-58.

¹⁶⁷² *Id.* at 153-54.

¹⁶⁷³ See Verizon Ex. 100, Vol. IV at Parts B-15 and B-16, *cited in* Verizon Ex. 107, at 155.

¹⁶⁷⁴ Verizon Ex. 124, at 104.

¹⁶⁷⁵ Verizon Ex. 107, at 159.

¹⁶⁷⁶ *Id.* at 154. There is no Option B. See *id.* at 154 n.33. Verizon explains that it refers in testimony to Options "A" and "C" to remain consistent with references in its cost studies. Option A is identified in Verizon's proposed interconnection agreement as Option "1," and Option C is identified as Option "2." *Id.*

¹⁶⁷⁷ *Id.* at 159; Verizon Ex. 124, at 104.

general support costs on all UNEs.¹⁶⁷⁸ Verizon claims that, even in Option A, it faces increased costs for testing, but it has not quantified these costs.¹⁶⁷⁹

652. Finally, with respect to its proposed NRC for splitter installation, Verizon explains that, if a competitive LEC requests that Verizon install the splitter, a one-time installation charge is applied.¹⁶⁸⁰ Competitive LECs also have the option of arranging for the installation of the splitter in a Verizon central office through the use of an approved installation vendor.¹⁶⁸¹

653. AT&T/WorldCom complain that Verizon's implied maintenance costs, which are based on digital equipment, are excessive for a splitter, which is a "simple, passive device[.]".¹⁶⁸² They also object to paying ACF-type charges based on investment that Verizon did not make.¹⁶⁸³ Moreover, these parties contend that it is inappropriate for Verizon to charge anything under Option A, where the competitive LEC purchases the splitter and installs it in space for which it has already fully paid.¹⁶⁸⁴ AT&T/WorldCom argue that "Verizon has provided no support for its assertion that a competitor's decision to collocate a splitter causes Verizon to incur any of these types of cost."¹⁶⁸⁵ With respect to Verizon's proposed NRC for splitter installation, AT&T/WorldCom object to Verizon's choice of splitter location,¹⁶⁸⁶ to Verizon's EF&I factor,¹⁶⁸⁷ and to Verizon's computation of NRCs.¹⁶⁸⁸

3. Discussion

654. We allow Verizon to impose a maintenance charge for Option C using its proposed ACFs because we agree that it is not feasible to develop a separate maintenance factor for every piece of equipment. We otherwise allow no recovery because Verizon has not met its

¹⁶⁷⁸ Verizon Ex. 124, at 125.

¹⁶⁷⁹ See *id.* at 125-26.

¹⁶⁸⁰ Verizon Ex. 107, at 155.

¹⁶⁸¹ *Id.*; Verizon Ex. 124, at 122.

¹⁶⁸² AT&T/WorldCom Ex. 13, at 126-27.

¹⁶⁸³ See *id.* at 130-36.

¹⁶⁸⁴ *Id.* at 131.

¹⁶⁸⁵ *Id.* at 132.

¹⁶⁸⁶ *Id.* at 123-25.

¹⁶⁸⁷ *Id.* at 126-30.

¹⁶⁸⁸ *Id.* at 137-39.

burden of showing what costs it actually incurs under Option C.¹⁶⁸⁹ Further, we reject any recurring charges for Option A because Verizon has not demonstrated that it incurs any incremental costs when a competitive LEC purchases and installs a splitter in a collocation cage for which it is already fully compensating Verizon. If any increased testing costs result, Verizon has not quantified them. Most importantly, however, the competitive LEC incurs these costs itself and should not have to pay them twice.

655. We adopt Verizon's proposed charge for splitter installation when it performs the actual installation. We find Verizon's evidence, in the form of actual vendor quotes, to be more credible than the competitive LEC estimates for splitter installation. Verizon's proposed EF&I factor also appears reasonable. As Verizon argues, if a competitive LEC finds Verizon's charge unreasonable, it may hire its own approved vendor.

H. ISDN Electronics

656. Verizon proposes a NRC to recover the capital costs of, and installation labor for, repeater equipment that enables ISDN-BRI to function on longer loops.¹⁶⁹⁰ Verizon proposes this NRC only for ISDN-BRI, as distinguished from Primary Rate ISDN, loops.

1. Positions of the Parties

657. Verizon claims that repeater equipment is necessary when metallic loop length is greater than 18,000 feet. It also claims that the costs of this equipment are not included in its development of the ISDN-BRI loop rate.¹⁶⁹¹

658. AT&T/WorldCom argue that the non-recurring cost that Verizon reports for this element is duplicative of costs Verizon recovers through its recurring charges for digital (*i.e.*, ISDN or DSL-capable) loops.¹⁶⁹² Verizon's forward-looking recurring costs for the digital line -- regardless of loop length -- already include required electronics.¹⁶⁹³ AT&T/WorldCom argue that competitors pay more for ISDN loops than for analog loops, and the increment paid on a recurring basis to Verizon reflects the costs of providing ISDN over fiber for loops of all lengths.¹⁶⁹⁴ Thus, AT&T/WorldCom claim that Verizon's proposed NRC is for the exact same

¹⁶⁸⁹ Specifically, we reject Verizon's wholesale marketing and support factors.

¹⁶⁹⁰ Verizon Ex. 107, at 162.

¹⁶⁹¹ *Id.*

¹⁶⁹² AT&T/WorldCom Ex. 13, at 153-55.

¹⁶⁹³ *Id.* at 153.

¹⁶⁹⁴ *Id.*

capability – but under the assumption of a different, all-copper network.¹⁶⁹⁵

659. These carriers also argue that Verizon should have treated the repeater material cost as it would ordinarily treat its other loop investments – as a recurring cost.¹⁶⁹⁶ A repeater is a relatively discrete network component, with a high degree of reusability.¹⁶⁹⁷ They contend that there is no valid reason that Verizon could not use the same repeater to serve a future customer at the same location, or reuse the repeater to provide ISDN services to a different wholesale or retail customer of the company.

2. Discussion

660. We reject Verizon's proposed charge. Elsewhere in this order, with respect to recurring charges, we adopt higher rates for ISDN-BRI loops than for basic two-wire loops, using AT&T/WorldCom's restatement of Verizon's proposal.¹⁶⁹⁸ This restatement presumes fiber, rather than copper, facilities.¹⁶⁹⁹ Accordingly, we agree with AT&T/WorldCom that the recurring charge for ISDN-BRI loops already includes the forward-looking costs of providing the functionality for which Verizon here proposes an additional NRC.

661. Moreover, Verizon does not adequately support its claim that the costs of this equipment were not included in its ISDN-BRI loop rate development. Verizon's loop cost study description for ISDN-BRI states that it includes costs of "equipment hardware and common plug-in cards and ... channel plug-in cards for BRI service."¹⁷⁰⁰ The cost summary includes entries for "electronics: common" and "electronics: plug-ins,"¹⁷⁰¹ but it does not describe what electronics were included or how the results were developed. We note that the term "electronic plug-ins" would generally include repeaters. Thus we find that Verizon has not demonstrated that the repeater costs it seeks to recover here are not already recovered in these electronics charges.

XII. RESALE

662. The 1996 Act requires that Verizon make available "for resale at wholesale rates any telecommunications service that [Verizon] provides at retail to subscribers who are not

¹⁶⁹⁵ *Id.*

¹⁶⁹⁶ *Id.* at 154.

¹⁶⁹⁷ *Id.*

¹⁶⁹⁸ See *supra* section IV(D)(3)(b).

¹⁶⁹⁹ See *supra* section IV(C)(2)(k)(iii).

¹⁷⁰⁰ See Verizon Ex. 100, Part B-4 § 1.1 at 000700.

¹⁷⁰¹ See *id.*, Part B-4 § 2.6 at 000744.

telecommunications carriers.”¹⁷⁰² Acting for the Virginia Commission, we must establish wholesale rates based on Verizon’s retail rates, “excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by [Verizon].”¹⁷⁰³ These sections of the 1996 Act are independent of those that set forth Verizon’s unbundling requirements, including the TELRIC pricing standard.¹⁷⁰⁴

663. The Commission’s original resale pricing rules were vacated by the United States Court of Appeals for the Eighth Circuit.¹⁷⁰⁵ In the *Local Competition First Report and Order*, the Commission adopted a “reasonably avoidable” standard governing the costs that must be considered avoided when calculating the wholesale discount.¹⁷⁰⁶ That is, the Commission found that any costs that “reasonably can be avoided” by the incumbent LEC when it provides a service at resale must be considered avoided in determining the discount.¹⁷⁰⁷ The Commission’s rules were ultimately vacated by the Eighth Circuit in *Iowa Utilities II* because the court found that the rules were inconsistent with the plain meaning of the statute.¹⁷⁰⁸

664. In *Iowa Utilities II*, the Eighth Circuit found that the appropriate standard for determining avoided costs is not those costs that “can be avoided,” but rather “those costs that the [incumbent LEC] will actually avoid incurring in the future.”¹⁷⁰⁹ Further, the court explained that, when determining avoided costs, the regulator may not assume that the incumbent is acting as a wholesaler only, but rather must assume that the incumbent provider is acting as both a wholesale and a retail provider.¹⁷¹⁰

¹⁷⁰² 47 U.S.C. § 251(c)(4)(A).

¹⁷⁰³ 47 U.S.C. § 252(d)(3). The full text of this section is as follows:

WHOLESALE PRICES FOR TELECOMMUNICATIONS SERVICES.—For the purposes of section 251(c)(4), a State commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier.

¹⁷⁰⁴ Compare 47 U.S.C. §§ 251(c)(4)(A), 252(d)(3) (resale standard), with 47 U.S.C. §§ 251(c)(3), 252(d)(1) (UNE standard).

¹⁷⁰⁵ *Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 754-56, 765 (8th Cir. 2000) (*Iowa Utilities II*) (vacating rules 47 C.F.R. §§ 51.609, 51.611), *rev’d on other grounds sub nom. Verizon v. FCC*, 535 U.S. at 467.

¹⁷⁰⁶ *Local Competition First Report and Order*, 11 FCC Rcd at 15956-57, para. 912.

¹⁷⁰⁷ 47 C.F.R. § 51.609(b).

¹⁷⁰⁸ *Iowa Utilities II*, 219 F.3d at 754-56, 765.

¹⁷⁰⁹ *Id.* at 755.

¹⁷¹⁰ *Id.*

665. The Commission has not conducted any further rulemaking to provide additional guidance on establishing wholesale discounts.

A. Timing – Whether to Set Wholesale Discount Rates in this Proceeding

1. Positions of the Parties

666. AT&T¹⁷¹¹ argues that the Bureau should decline to establish the wholesale discount in the arbitration.¹⁷¹² Instead, we should retain the discounts previously ordered by the Virginia Commission until the Commission conducts a rulemaking to revise its rules for determining the wholesale discount.¹⁷¹³ Only through a rulemaking will the Commission receive input from the entire industry before first interpreting the Eighth Circuit's opinion.¹⁷¹⁴ Moreover, lowering the discount rate would destroy the already anemic level of resale competition.¹⁷¹⁵

667. Verizon objects to retaining the discount rates previously established by the Virginia Commission.¹⁷¹⁶ First, Verizon argues that because the current wholesale discount rates were established pursuant to the Commission's now vacated wholesale discount standards, these discount rates may not be perpetuated.¹⁷¹⁷ Second, Verizon claims that the Eighth Circuit set forth a clear standard and that Verizon's avoided cost study complies with this standard.¹⁷¹⁸ Finally, the job of the Bureau is to apply the statute, not to ensure that the discount is high enough to guarantee that resale is a profitable means of entry for individual competitors.¹⁷¹⁹

2. Discussion

668. We agree with Verizon and will establish wholesale discount rates in this arbitration. As we stated in the *Non-Cost Arbitration Order*, we are required under the 1996 Act

¹⁷¹¹ All resale issues in this arbitration are between Verizon and AT&T only. WorldCom neither took any position on wholesale discount issues nor sponsored any witness on this subject.

¹⁷¹² AT&T Ex. 14 (Kirchberger Rebuttal), at 2, 14; Tr. at 3702-03, 3740-42; *see also* AT&T/WorldCom Initial Cost Brief at 238-40.

¹⁷¹³ AT&T Ex. 14, at 4, 14; Tr. at 3702-03, 3740-42; *see also* AT&T/WorldCom Initial Cost Brief at 238-39.

¹⁷¹⁴ AT&T Ex. 14, at 2, 4; Tr. at 3702-03, 3740-42, 3750-51, 3753-54.

¹⁷¹⁵ AT&T Ex. 14, at 2, 7-8; *see also* AT&T/WorldCom Initial Cost Brief at 239-40.

¹⁷¹⁶ Verizon Ex. 121 (Minion Surrebuttal), at 2-4; *see also* Verizon Initial Cost Brief at 222.

¹⁷¹⁷ Verizon Ex. 121, at 2-3; *see also* Verizon Initial Cost Brief at 222-23.

¹⁷¹⁸ *See* Verizon Ex. 107, at 238; Verizon Ex. 121, at 1; Tr. at 3742; Verizon Initial Cost Brief at 223.

¹⁷¹⁹ *See* Verizon Ex. 121, at 3-4; Verizon Initial Cost Brief at 228-29; *see also* Tr. at 3730, 3750-51; Verizon Reply Cost Brief at 192.

to decide all issues that are fairly presented to us.¹⁷²⁰ AT&T has not alleged that the issue of the wholesale discount was not properly raised by the parties. Rather, testimony was filed, cross-examination occurred during the hearing, and the issue was briefed.¹⁷²¹ Verizon also correctly states that the wholesale discount rates previously established by the Virginia Commission were based on the Commission's now vacated rules. Accordingly, it would be improper for us to continue to apply these rates to continue prospectively. Rather, the record before us is sufficient for us to establish new discount rates under the Eighth Circuit's standard.

669. Establishing wholesale discount rates in this proceeding, of course, does not preclude the Commission from examining the issue later in a rulemaking proceeding.¹⁷²² The rules that would result from any such proceeding would necessarily be based on the record compiled in that proceeding, and would not be prejudiced by any decision that we reach here.

670. Finally, we agree with Verizon that our role is to apply the statute in determining the appropriate discount.¹⁷²³ Once the discount rate is set through the proper application of the statute, it is then up to the market place to determine how much competition will develop via resale. Nowhere in section 252(d)(3) are we required, or even permitted, to adjust the discount to manipulate the level or profitability of resale market entry.¹⁷²⁴

B. Wholesale Discount Standard

1. Positions of the Parties

671. Verizon claims that the Eighth Circuit clearly articulated the standard that must be used in an avoided cost study: the costs to be excluded in determining the wholesale discount are those costs, regardless of type (*e.g.*, marketing), that the incumbent LEC actually will avoid when providing services to resellers.¹⁷²⁵ Verizon argues that the appropriate starting point in making such a calculation is its determination of the costs that Verizon actually avoids today.¹⁷²⁶

¹⁷²⁰ *Non-Cost Arbitration Order*, 17 FCC Rcd at 27043, para. 3 (citing 47 U.S.C. §§ 252(b)(4)(C), 252(c)).

¹⁷²¹ *See, e.g.*, AT&T/WorldCom Initial Cost Brief at 232-40; Verizon Initial Cost Brief at 222-29.

¹⁷²² *See Verizon Initial Cost Brief* at 223 ("The Commission may choose in the future to issue new rules interpreting section 252(d)(3).").

¹⁷²³ *See Verizon Ex. 121*, at 3.

¹⁷²⁴ *See* 47 U.S.C. § 252(d)(3).

¹⁷²⁵ Verizon Ex. 107, at 338; Verizon Ex. 121, at 1-3; *see also* Verizon Initial Cost Brief at 222-23; Verizon Reply Cost Brief at 188-89, 191.

¹⁷²⁶ Tr. at 3742-44, 3746-50 ("I [Verizon witness Minion] still firmly believe that the examination of our existing operations serves as the reasonable starting point to examine what functions will not be needed—which functions will truly be avoided going forward . . . but not going into the more hypothetical potentially avoided, what happens 10 years down the road when such-and-such may not occur." *Id.* at 3746-47); *see also* Verizon Ex. 107, at 334, 341-42; Verizon Reply Cost Brief at 190.

Verizon does not believe that there are additional costs that it will avoid in the foreseeable future, even if competitive entry reaches a level as high as forty percent.¹⁷²⁷

672. AT&T posits that the statute mandates the exclusion of all marketing, billing, and collection costs when determining the wholesale discount.¹⁷²⁸ Any other costs that will be avoided by Verizon must also be excluded.¹⁷²⁹ AT&T further argues that a fully competitive local service market should be assumed when determining which costs will be avoided in the future.¹⁷³⁰ Verizon fails to make this assumption, as it fails to take into account costs that would be avoided as competition increases in the future.¹⁷³¹

2. Discussion

673. We find that the legal standard advocated by Verizon more closely tracks the statutory language (as interpreted by the Eighth Circuit) than does that advocated by AT&T. As explained by the Eighth Circuit, the costs that must be excluded are those that Verizon, due to its activities as a wholesaler, “will actually avoid incurring in the future.”¹⁷³² Although section 252(d)(3) identifies marketing, billing, and collection costs as categories of costs that *may* need to be excluded if they are avoided, it does not require the exclusion of all such costs. Grammatically, the dependent clause “that will be avoided” modifies the noun “costs.” Similarly, the adjectives “marketing,” “billing,” “collection,” and “other” all modify “costs.” Therefore, costs – whether marketing costs, billing costs, collection costs, or other costs – must be excluded only if they actually “will be avoided.” Accordingly, we disagree with AT&T that *all* marketing costs, billing costs, and collection costs must be excluded. Rather, such costs must be excluded *only if* they are now, or will be in the future, avoided by Verizon in its provision of wholesale services.

674. Because we must assess the costs that will be avoided, it is reasonable to begin by analyzing the costs that Verizon avoids today in providing wholesale services to AT&T for resale. We are troubled, however, that Verizon, after conceding that the legal standard is the costs it will avoid in the future, claims that it can identify no additional costs that it anticipates it will avoid in providing wholesale services in the foreseeable future. In fact, Verizon claims that it could lose up to forty percent of its market share without avoiding any additional costs.¹⁷³³

¹⁷²⁷ Tr. at 3754-55.

¹⁷²⁸ AT&T Ex. 14, at 3; *see also* AT&T/WorldCom Initial Cost Brief at 233-34.

¹⁷²⁹ AT&T Ex. 14, at 3; *see also* AT&T/WorldCom Initial Cost Brief at 234.

¹⁷³⁰ AT&T Ex. 14, at 5-6; *see also* AT&T/WorldCom Initial Cost Brief at 234.

¹⁷³¹ AT&T Ex. 14, at 3, 5-7; *see also* AT&T/WorldCom Initial Cost Brief at 234-35.

¹⁷³² *Iowa Utilities II*, 219 F.3d at 755.

¹⁷³³ *See* Tr. at 3754-55.